



**Systems Commissioned:**

- Building automation systems (BAS) and room monitoring systems
- HVAC systems
- Chilled water
- Steam system
- Air-handling units (AHUs)
- Constant air volume (CAV) units
- Reheats
- Duct distribution and terminals
- Filtered exhaust system
- Ventilated cages
- Animal watering systems
- Bottle filler
- Cage washers
- Bin washers
- Bedding dispensers

Commissioned: Q1 2022

**University of Pennsylvania Vivarium  
King of Prussia, PA**

The University of Pennsylvania (UPenn) undertook a major renovation and upgrade of its vivarium facility. This included mouse, rat, and non-human primate holding rooms, lab areas, necropsy area, offices, and mechanical support spaces.

PrecisCx supported development of a preventative maintenance program (PM) and standard operating procedures (SOP) to be used within the facility. PrecisCx also provided direction and start-up support for the existing equipment. Commissioning of new and modified equipment was leveraged through the use of commissioning test plans (CTP) that were required to support facility certification.

The project was once a retrofit of an existing R&D facility into Vivarium space and required re-commissioning of existing equipment with all new BAS controls.

This project took place within an existing operating facility. Great care and coordination were required to minimize impact to ongoing operations and animal care.

The project was able to remain on schedule as a result of the coordination efforts of the extended commissioning team including construction management, trades, facility operators and the owner.



**Project Reference**

Robert Brockway  
Project Manager  
MLP Builders  
Radnor, PA  
(610) 337-5707  
rbrockway@mlpbuilders.com

**Project Data**

Size: 56,000 square feet  
Category: Vivarium  
Scope: Renovation  
Type: Leveraged Commissioning  
Cost: Confidential

**PrecisCx Team**

Principal in Charge: Kari Donovan, PE, CxA  
Project Manager: Harry Koons, CxA, LEED AP  
Cx Specialist: Jesse Murren